

Careful Catch and Release



Helping large pelagic fish survive to fight another day

Photo by J. Graves

Here are some tips on handling and releasing large saltwater pelagic fish including tunas, billfish, sharks, and swordfish, to maximize their survival after catch and release. These fish are also known collectively as "highly migratory species" or "HMS" because of their far-ranging, migratory behavior.

Careful Catch & Release Guidelines

1. Plan Ahead

- Be prepared to practice careful catch and release before your fishing trip begins. Bring along any necessary gear and discuss handling and release procedures with your fishing party.
- Make sure each member of the fishing party understands his or her part in increasing safety for both fishermen and fish alike.
- Plan ahead to retain legal-sized fish that are wounded or severely stressed from capture or handling, and to release fish that are in good condition.
- Start to plan your release strategy as soon as a fish is hooked, so that you can successfully release the fish and maximize its chances of survival.

2. Gear

- Use corrodible, non-stainless hooks in case the leader must be cut. A non-stainless hook remaining in a fish will corrode at a faster rate.

- Use non-offset circle hooks, which are more likely to hook the fish in the corner of the mouth rather than sensitive areas like the gut.



J-hook (left) and circle hook (right). Photo by MA DMF.

- If you plan to catch and release, flatten hook barbs or file barbs down to make removal easier.
- Use a de-hooker to remove the hook from the fish. There are a wide variety of dehooking tools available on the market.
- Rig a measuring device so the fish can be measured in the water. For example, a leader with a clip on one end and a small float on the other end can be marked off with a red flag at the legal retention size; or, mark a pole or the gunwale of the boat with measurements for the legal retention size.

3. Play and Handling

- Use appropriately sized tackle and bring the fish in quickly to reduce exhaustion. Playing a fish to exhaustion depletes its energy reserves and causes lactic acid build up in the tissues, which can eventually lead to mortality.
- If you are not using circle hooks, be attentive and set the hook immediately in order to lip/jaw hook the fish, and prevent it from swallowing the hook.

Remember, the survival of a released fish today will help lead to healthy stocks for future harvest.



Further information on management of Atlantic HMS: <http://www.nmfs.noaa.gov/sfa/hms/>

4. Release and Revive

- If the fish swallows the hook or is hooked in a sensitive area like the gills, cut the leader as close to the hook as possible. Cutting the leader may also be appropriate in dangerous conditions like rough seas.
- One way to revive an exhausted fish is to lip-gaff it in the front part of the lower jaw, or use a snooter for billfish, and tow it slowly behind the boat, making sure the fish's head is totally submerged. HMS are ram-ventilators and cannot breathe unless they are moving. Some experienced charter captains suggest towing the fish until its color returns, which may take 10-15 minutes.



NOAA Photo by E. Orbesson

- If you want to take a picture of the angler and the fish together, have the angler lean over the side instead of taking the fish out of the water. Do not grab or hold the fish by the gills.

• Minimize physical handling. Leave the fish in the water And do not gaff it in the body. Lip gaffing the fish or a "snooter" can be used to help control the fish boat-side and remove the hook.

The objectives of careful catch and release include:

- Reducing stress and minimizing injury to the fish while reeling it in and handling it, and
- Assisting in recovery of the fish prior to release.

These objectives are especially challenging because of the size and potentially dangerous features (e.g., teeth and "swords") of many HMS. To assist in meeting these objectives, please use the guidelines in this brochure.

Whether you prefer to release all captured HMS, or continue to catch and release only after achieving your retention limit, handling these species to maximize survivability after release is part of being an ethical angler, and it's the law. Every HMS released alive moves the nation one step closer to the goal of achieving and maintaining sustainable fisheries.

Practicing careful catch and release is important because in some fisheries with high fishing pressure, the number of fish that die after being caught and released sometimes is actually larger than the number of fish that die through catch and retention.

A good example of this occurs in the Massachusetts recreational striped bass fishery. The Massachusetts Division of Marine Fisheries reports that approximately 500,000 striped bass die annually in the local recreational fishery from the stress associated with handling and release, while only 300,000 stripers are annually retained (http://www.mass.gov/dfwele/dmf/spotlight/fish_responsibly.htm).

Federal law at 50 CFR 635.21(a)(1) requires that any Atlantic HMS that is caught but not kept, be released in a manner that maximizes its probability of survival. The law also requires that fish that are going to be released may not be removed from the water.